

Heat Release Testing of Seat Components

John Shelden - FAA

At the time the applicable rules were written, seats were designed with a metal frame covered by fabric, not with large, non-metallic panels. With the seat design being mostly fabric and metal, the contribution to a fire in the cabin had been minimized and was not considered a threat. For these reasons, seats did not need to be tested to heat release and smoke emission requirements. Seat designs have now evolved to occasionally include non-traditional, large, non-metallic panels. Taken in total, the surface area of these panels is on the same order as the sidewall and overhead stowage bin interior panels. To provide the level of passenger protection intended by the airworthiness standards, these non-traditional, large, non-metallic panels in the cabin must meet the standards of Title 14 Code of Federal Regulations (CFR), part 25, Appendix F, parts IV and V, heat release and smoke emission requirements.